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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,654	06/27/2001	Takashi Maruko	Q65201	5513

7590 01/14/2005

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Washington, DC 20037-3213

EXAMINER ,
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DUONG, THANH P

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/891,654

Applicant(s)

MARUKO ET AL.

Examiner

Tom P Duong

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1-3, 6-7, and 10-11 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese Publication (2000-051397), herein referred as JP '397. Regarding claims 1-3, 6-7, and 11, JP '397 discloses a multi-layer golf ball comprising of a solid core (1) with a deflection of 3.0-4.5 mm under an applied load of 100kg (Abstract), an intermediate layer (2) made of ionomer resins (Section 0023) with thickness G1 of 0.8-3.5 mm (Section 0033) and Shore D hardness of 45-57 (Section 0034), and a cover (3) with thickness G2 of 0.5-2.5 mm (Section 0041) and Shore D hardness of 45-70 (Section 0041) and is formed of an urethane resin (Section 0036). JP '397 does not disclose the optimized formula:  $[G_1/(G_1 + G_2)] \times 100 \Rightarrow 45\%$ ; however, selecting a given G1 value of 1.0 mm and G2 value of 1.0 mm from the above range and substituting these values into the above formula will yield 80%, which is greater than or equal to 50%, which satisfies the above optimized formula. Thus, it would have been obvious in view of JP '397 to one having ordinary skill in the art to select the appropriate G1 and G2 values in the above range to satisfy

the optimized formula thru routine optimization. Regarding claim 10, JP '397 does not disclose the optimized formula:  $65\% \Rightarrow [G_1 / (G_1 + G_2)] \times 100 \Rightarrow 50\%$ ; however, selecting a given G1 value of 1.2 mm and G2 value of 1.0 mm from the above range and substituting these values into the above formula will yield 54%, which satisfies the above optimized formula. Thus, it would have been obvious in view of JP '397 to one having ordinary skill in the art to select the appropriate G1 and G2 values in the above range to satisfy the optimized formula thru routine optimization.

2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the JP '397. JP '397 discloses a urethane cover (Section 0036) of the claimed invention but fails to disclose expressly the melt index of at least 3.0 dg/min at 190° C. Note, the melt index is a process parameter that used to control the viscosity of the polymer material during the molding process in order to provide proper molding of the ball cover. It is conventional to control a melt index of at least 3.0 dg/min at 190° C in order to provide proper molding to the cover and it would obvious to do so here to gain the same benefit. Note, Product-by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (See MPEP 2113).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4 , 6-7, and 10-11 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P Duong whose telephone number is (571) 272-2794. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Duong  
January 7, 2005

TD



Glenn Caldarola  
Supervisory Patent Examiner  
Electronic Business Center 1700